

Soquel Demonstration State Forest

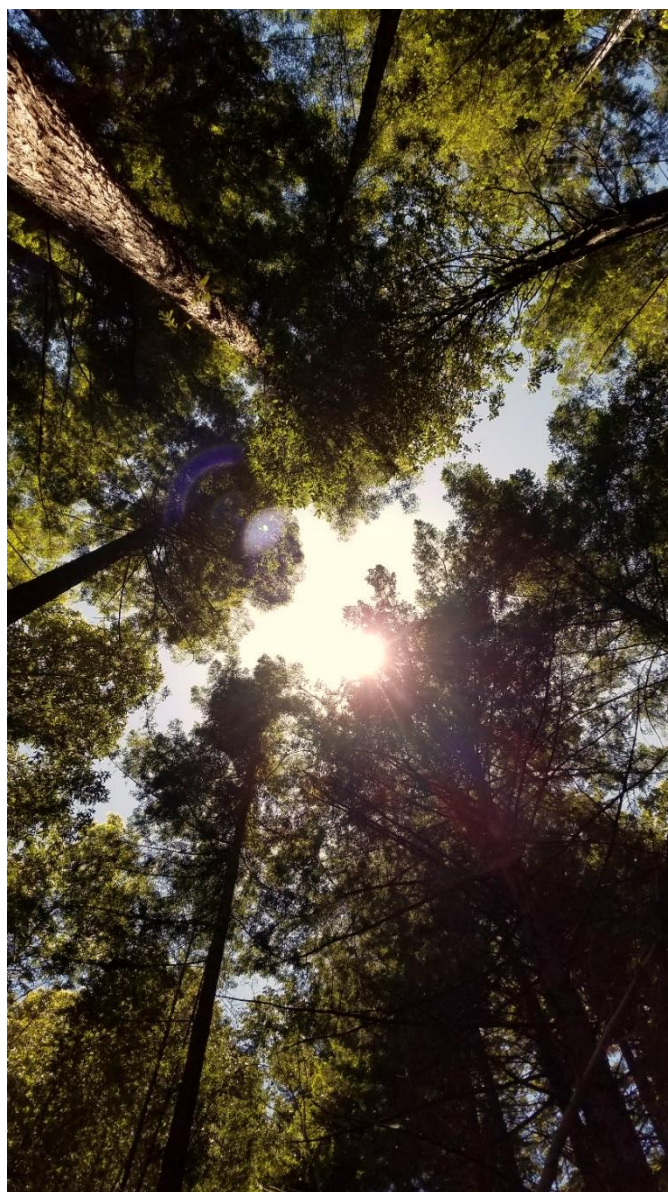
2017 Annual Report

Angela Bernheisel
Forest Manager



State of California
DEPARTMENT OF FORESTRY
AND FIRE PROTECTION

Northern Region
San Mateo-Santa Cruz Unit (CZU)
Santa Cruz County



SUMMARY

Winter storms caused extensive damage to the forest roads and trails where access was blocked by landslides and slip outs. By January 11, 2017 the forest was closed to all public use. An emergency contract was secured, and repairs were completed once saturated soils dried. The forest reopened for public access on June 3, 2017. The two-year Meridian Timber Harvesting Plan was approved, sold and operations began, which included demonstrations and timber tours. The Bear Fire impacted the Unit in October and forest staff were all assigned to the incident.

Despite the shortened season for project work, due to the winter storm damage, projects continued for research, education, and fuel reduction. New opportunities were explored for accomplishing the long-term goals for improved public access.

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ADMINISTRATION

Angela Bernheisel remained Forest Manager, along with Assistant Forest Manager Colin Noyes and half-time Office Technician Anna Cameron. Forestry Aides Marco De Anda and Elynn Hagelshaw completed their first season on February 28 and returned for a second season on June 1. CAL FIRE San Mateo-Santa Cruz Unit (CZU) Fire Captain Sean Adams was assigned to assist with forest projects from March 14 through April 20. He worked with forest staff on the water tanks in the forest, and with the Ben Lomond Conservation Camp crews to remove invasive plant species and to complete fuel reduction work. The Forest also received assistance from State-funded engine crews in the spring to continue the installation of shaded fuel breaks along the northwest forest boundaries adjacent to neighboring homes.



Forest staff 2017 at Loma Prieta

Intense winter storms in December 2016 and January 2017 resulted in landslides and road slip outs, blocking access to the forest and creating hazards on roads and trails. Rainfall from Dec. 1, 2016 until Jan. 11, 2018 totaled over 27 inches, and the forest had to be temporarily closed to public use for several months.

Large closure signs were posted at the two public entrance locations on Highland Way and Ridge Trail, and contact was made with local bike shops to provide the closure notice to the public. Updates were provided through news releases and social media announcements on the Soquel Demonstration State Forest (SDSF) Facebook page, Twitter, the SDSF webpage on the California Department of Forestry and Fire Protection (CAL FIRE) website, and online mountain biking forums. Forest staff received numerous phone calls on a daily basis during the closure, mostly from mountain bikers asking about re-opening. These calls provided forest staff with the opportunity to remind visitors that life-safety hazards existed due to active unstable areas. The forest office faced recurring internet and power outages throughout the storm period. County roads to the forest entrance in both directions were intermittently closed from slides and downed trees for several months.



Two large slides on Hihn's Mill Road

California Geological Survey (CGS) Geologists Cheryl Hayhurst and Dave Longstreth assessed the slide areas, streambank revetment and road repair sites and provided a report. Road and trail repairs were made under an emergency contract and work began on May 3, once permits were obtained and conditions were dry enough to support heavy equipment operations. The contractor, with assistance from CAL FIRE personnel and equipment, restored access along the main access road through the forest by installing a retaining wall, clearing large slides, building a re-route around another large slide and installing culverts and drains. The forest was reopened for public access on June 3. Forest staff were assisted by Ben Lomond Conservation Camp Crews, SRA firefighters and Unit Heavy Fire Equipment Operators (HFEOs) to clear the landslides and repair the roads. Professional fallers were hired to conduct technical falling and bucking of trees brought down in landslides.



Large slide on Hihn's Mill Road – before, during and after repairs

Bernheisel and Noyes worked with CAL FIRE staff in Sacramento to compile repair records to apply for emergency public assistance through the Federal Emergency Management Agency (FEMA). They coordinated with Office of Emergency Services staff, CAL FIRE Sacramento staff, and FEMA. All receipts were submitted totaling \$53,391 for the emergency contract and \$22,000 for materials and other services, and these funds should be reimbursed to the Forest Resources Improvement Fund (FRIF). In November, a FEMA field consultant toured the forest with Bernheisel, Noyes and Deputy Chief Tanya Lange to view the landslide areas, repaired roads, and new culverts, and to complete the final review.



Failed portion of road and re-route away from failed road



Road slip-out along Hihn's Mill Road – before, during and after construction of Hilfiker wall

Bernheisel continued to be part of the Unit Management Team, led by Unit Chief Ian Larkin, and she served as the Unit Public Information Officer (PIO) including several days as PIO on the Bear Fire in the Unit. The Bear Fire started on October 16 in Boulder Creek; Bernheisel, Noyes, De Anda and Hagelshaw worked for several days on the incident. Noyes work in Fireline Suppression Repair, and De Anda and Hagelshaw were Technical Specialists in the call center and damage assessment. Bernheisel also served as PIO for Vegetation Management Program (VMP) burns in the Unit, including the areas of Wilder Ranch State Park and Marshall Field at the University of California Santa Cruz (pictured below).

In February, Bernheisel participated in the first meeting of the Cal Poly Swanton Pacific Ranch, Forest Management Advisory Group. She continued to attend the Jasper Ridge Biological Preserve Coordinating Committee meetings throughout the year. She also became a new member of the Santa Cruz Mountains Stewardship Network, began attending their regular meetings, and participated on a panel covering forest management at a Spotlight Stewardship field tour <http://scmsn.net/>. The Spotlight program aims to educate local leaders, politicians and business members about forestry, resource management issues, and land management strategies. The program plans to include several field trips including a future tour with a focus on CAL FIRE.



Marshall Field VMP burn

Bernheisel, Hagelshaw and De Anda attended the Board of Forestry field tour at Mountain Home Demonstration State Forest on September 27 and 28. Bernheisel and some staff from SDSF attended the Santa Cruz Mountains Stewardship Network-hosted Salons, on topics such as cultural landscapes and Native American land use, recreation and demographics, and “Restoration Forestry”.



**Left: Forest Managers Jason Proburko, Angela Bernheisel and Jim Kral
Right: Jim Kral, Ellyn Hagelshaw and Marco De Anda at the Methuselah Tree**



Bernheisel participated on a team of reviewers for the San Vicente Redwoods Public Access Plan to make recommendations to the Land Trust of Santa Cruz, which is responsible for preparing and implementing the plan. CZU Operations Chief, Jake Hess, also participated in reviewing the plan as it related to emergency response and communications. This land is the former Davenport Cemex property; the landowners are not interested in owning the property in the long term, and are considering CAL FIRE, along with State Parks and the U.S. Department of the Interior's Bureau of Land Management (BLM), as potential future owners of the property.

Noyes was assigned to the Wall Fire for ten days in July as a Field Observer, and worked on the Southern LNU Complex fires in Sonoma-Lake-Napa Unit for a week in mid-October as a Fireline Suppression Repair Specialist. He also assisted with Forestry Aide interviews for 2017 hiring.

Bernheisel worked with local landowners, local land trusts, and CAL FIRE staff from the Unit and Sacramento on new forest land acquisitions for CAL FIRE. In the summer, Bernheisel provided property status summaries for the Barr and Kaylor properties to Sacramento staff. She also met with representatives from the Stewards of Soquel Forest and the Santa Cruz Mountains Alliance about their efforts in working with local politicians to advocate for developing new and better access to SDSF.

The process to remove the nuisance structure on the nearby Noren property included completing the California Environmental Quality Act (CEQA) requirements, and a Mitigated Negative Declaration was completed and posted for public comment. Bernheisel and Noyes, with assistance from CAL FIRE Senior Environmental Planner Christina Snow, produced much of the document in 2016 and revisions were finalized in 2017. In the summer, Bernheisel met with CAL FIRE biologist Michael Baker to assess potential bat habitat at the Noren house; he found no evidence of bat use. This information helped to complete the CEQA documentation. After the Environmental Filing fee was received by the Department of Fish and Wildlife, and the Notice of Determination was received by the Governor's office of Planning and Research, Bernheisel coordinated the removal project under a contract through Technical Services in Sacramento. The remediation of hazardous material was completed by MG Remediation, Inc. on October 11, and the structure was removed by GeoCon on November 7.



Bernheisel at the Noren House Demolition

Bernheisel received an update from CAL FIRE Technical Services concerning the plans for construction of a Forest Office to replace the office trailer from 1991. The project was delayed every year since 2014 and is now estimated to possibly begin by the end of 2019. Given the state of the 26-year-old trailer that is used as the forest office, it is unlikely that it will be useful past 2019 without major additional maintenance to the floors, walls, ceiling and roof. During the summer, forest staff, with the assistance of firefighters from the Unit, completed repairs to the Forest Shop building including a new roof and new paint.

Gate repairs were made to repair damage from vandalism at the public entrance on Highland Way and Amaya Creek Road. Repairs were also made to the roof of the Longridge storage container in the forest.



Amaya Creek Road gate repair with anti-ramming protection

Forest vehicles included: Ford F-250 (D1707 Bernheisel), a new Dodge 2500 (F1793 Noyes), a 2001 Ford F-150 (F1796) for forest staff including the Forestry Aides, a 2014 Yamaha Grizzly 450 ATV, a 1992 Built Rite utility trailer, a second utility trailer and two federal excess vehicles: a refurbished Kawasaki mule UTV, and a Yamaha Big-Bear ATV. On several occasions, D1707 had electrical problems that prevented it from starting and the issues were eventually diagnosed and repaired. At the end of the fiscal year in June, funds were made available to replace the unfunded vehicle, F1796, and the one-year process for vehicle replacement was started. A replacement chipper is still needed for forest projects and fire prevention efforts. In the meantime, forest staff borrowed the Santa Cruz County Fire Chief's chipper to treat roadside fuel along Hihn's Mill Road. The generator for the station and forest office got a new battery and was working again when the power was out for several hours on October 24.

Unit IT Coordinator Sandra Walls upgraded forest computers and software and supported the forest office when files became corrupted during power and internet outages from winter storms. After forest staff worked for weeks with challenges with technology, Walls was eventually able to restore all corrupted files. A new IT Coordinator for the Unit, Greg Walls, was hired in the fall. The forest office

purchased a tablet for field data collection, and continued to use a twelve-year old Canon copy machine. A GPS antennae booster was purchased to increase waypoint accuracy during timber cruising and GPS data collection.

The Soquel Forest Fire Station was closed for the season on November 6, and the Unit transitioned out of peak fire season on November 20. The total precipitation recorded at the forest weather station for calendar year 2017 was 73.94 inches. The months with the highest rainfall were January with 27.9 inches and February with 24 inches. The water year rainfall from October 2016-September 2017 was 93.86 inches. The weather station was recalibrated as part of its annual maintenance under a three-year contract. Weather data was available online at the [www.weatherunderground.com](https://www.wunderground.com/cgi-bin/findweather/getForecast?query=pws:KCASOQUE20) site and to researchers at <https://www.wunderground.com/cgi-bin/findweather/getForecast?query=pws:KCASOQUE20>

FIRE PREVENTION

Forest staff worked with fire crews from the Ben Lomond Conservation Camp to maintain the lower helipad, remove hazard trees, burn piles, and work on the shaded fuelbreak along Sulphur Springs Road and Comstock Mill Road. Crews also opened culverts and cleaned ditches along the main road system in the fall to prepare for the winter season. Noyes worked with crews to remove hazard trees along the forest boundary and near an adjacent residential driveway.

On September 11, a small fire started from a lightning strike in the forest. Noyes and other CAL FIRE resources located and contained the fire located near Sulphur Springs Road.

Additional water tanks were obtained with year-end funds and a well pump was installed on the existing well on the east side of the forest to improve water availability for firefighting and forest management.

The Roads and Trails Assessment Report was reviewed and forest staff worked with CGS geologists to use the Collector App for data collection and database management. The two ArcGIS licenses for the SDSF supplied usernames and passwords to ArcGIS Online accounts. This enabled staff to use the Collector App in the field from mobile devices, and an interactive map was created for the Roads and Trails Assessment. Private equipment operator Bob Pinkard was hired for two days in December, taking advantage of favorable weather, to do road shaping and rocking at specific locations on forest roads that needed improvement.

Soquel Water District personnel were provided a tour of potential planting sites for oak trees along Comstock Mill Road in the forest, where high mortality of madrone and oaks has been occurring over the past decade. As part of the mitigation for a water district project, oak trees must be planted in the watershed, and SDSF was identified as one of the potential planting sites.

TRAINING

The S-212 chainsaw training that was scheduled at SDSF in February was canceled due to winter storms and lack of access. In March, Noyes assisted as part of the S-212 cadre for A-faller training at Henry Cowell Redwoods State Park, and with the S-212 B-Faller class at Wunderlich County Park in San Mateo County. He also attended S-236 Heavy Equipment Boss, in the fall.

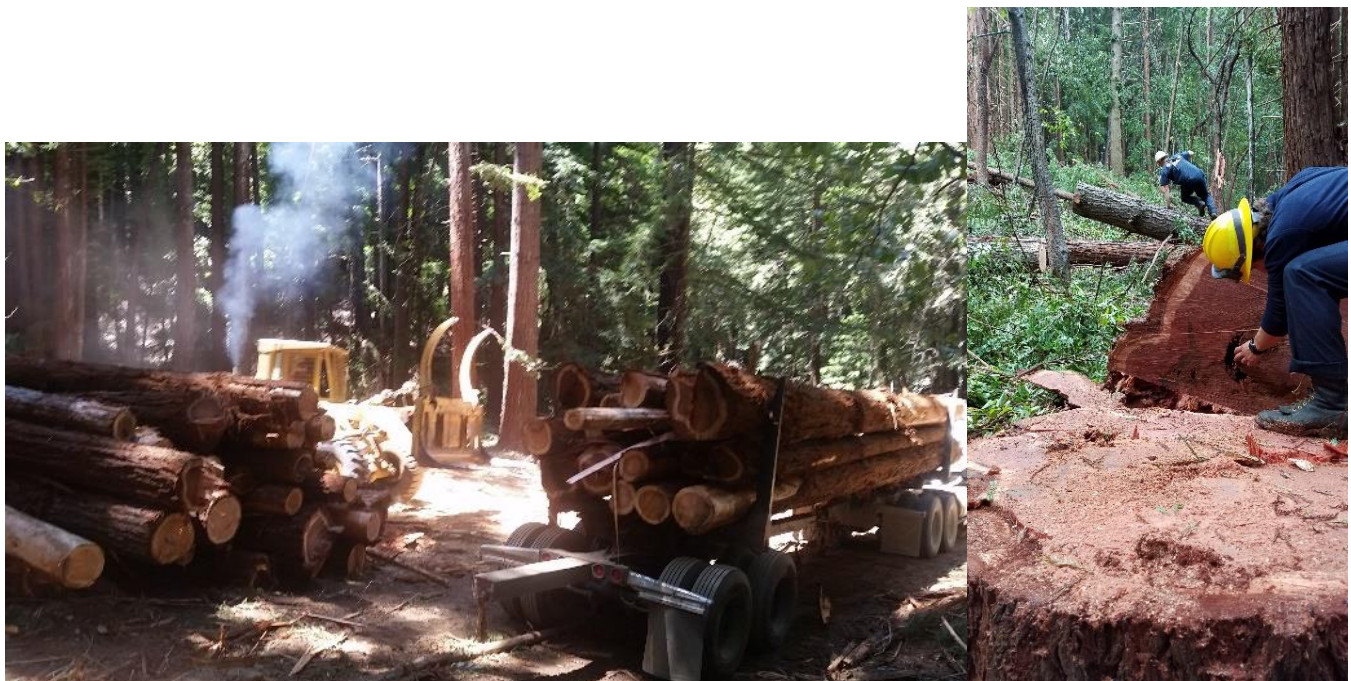
Bernheisel attended the CAL FIRE Information and Education Workshop in Anaheim in February and a multimedia training in Fresno in November where the Unit received new PIO equipment from Sacramento Communications Program.

Cameron completed Hands-only CPR training at Unit Headquarters. Forestry Aides De Anda and Hagelshaw attended the California Licensed Foresters Association (CLFA) workshop on water issues in California forest management in Chico. Noyes, Bernheisel and Hagelshaw attended CPR/AED certification training. Bernheisel and Noyes completed their EMS Skills Recertification.

The Monterey Bay Search Dogs group continued to use the forest for search-dog activities under a Special Use Permit for education and training. They are affiliated with the Santa Cruz County Sheriff's Department Search and Rescue Team and the California Task Force 3 Urban Search and Rescue team.

TIMBER MANAGEMENT

The Meridian Timber Harvesting Plan (THP #1-15-139 SCR), located in the Sawpit Trail area west of the Rim THP, was revised, items were removed from the contract to simplify it, and the sale was re-bid with no minimum bid required. At the bid opening on February 15, three bids were received and the contract was awarded to the highest bidder, Redwood Empire Sawmills, at \$622.30/MBF (thousand board feet) for redwood, for a total projected timber sale revenue of \$985,640.90. Operations on the THP began on May 10 after access to the forest was cleared. The THP was inspected by Forest Practice Inspector Scott Bullock on June 21 and August 1. Watercourse construction projects within the Meridian THP were completed during the summer. CGS representative John Oswald provided advice during installation and reviewed new road construction. Erosion control and road work was completed just as the Bear Fire started in October, and water quality monitoring continued through the winter. The total net volume removed in 2017 was 1,359.29 MBF of redwood and 107.70 MBF of Douglas-fir for a revenue of \$846,963.17. Additional harvesting and work in the THP area will occur in 2018 to complete the project.



Meridian THP operations

Forest staff led a field trip of the Meridian THP for over 50 local elementary school students and teachers on September 13. They learned about state forests, sustainable forestry and wood products, observed timber operations, and met with the loggers.



Licensed Timber Operator, Kenny Pelphrey, demonstrating tree falling to Mountain Elementary School group

Another field trip of the Rim and Meridian THP areas was held on October 5 for 21 people from the local community, Sierra Club, Peninsula Open Space Trust, the Santa Cruz Mountains Stewardship Network, Santa Cruz County Planning Department and the local CAL FIRE Unit. Bernheisel and Noyes directed the group and provided the history of SDSF, its previous harvests, and forest management techniques. Representatives from Redwood Empire and Big Creek Lumber spoke to the group about local and global forestry issues. The Licensed Timber Operator for Meridian demonstrated logging methods and techniques for the group and discussed forestry in the Santa Cruz mountains.



Meridian Field Trip for local community

Work continued on the Intensive Forest Inventory with De Anda and Hagelshaw during 2017, under guidance from Jeff Leddy, CAL FIRE State Forest Biometrician, headquartered in Sacramento. In 2016, 134 plots were completed and in 2017, 307 plots were completed. To finish the inventory, approximately 80 more plots will be completed, including the plots that cover the Meridian THP area, once the timber sale is done in 2018.

A road use agreement was developed for a neighboring timberland owner to complete a small timber harvesting plan.

Ten firewood permits (Class 1 Timber Sales) were issued in 2017 for a total of \$6510 in revenue to the Forest Resource Improvement Fund (FRIF). There were 325.5 cords sold for \$20 per cord, and all firewood permits expired on October 15, 2017.

RESEARCH

Photo monitoring of the Large Woody Debris (LWD) project was continued by Forestry Aides Hagelshaw and De Anda and monitoring was conducted by CGS Geologists. Although the winter storms were prolonged and brought a much larger than average rainfall amount to the area, the individual storms did not create extreme spikes in peak flows; the LWD structures were relatively stable. Cheryl Hayhurst from CGS reviewed the sites with a graduate student assistant to update reports for ongoing monitoring of movement of the structures.

National Oceanic Atmospheric Administration (NOAA) Fisheries staff, Santa Cruz County biologists, volunteers, and forest staff conducted annual electro-fishing along Soquel Creek in September and October. They sampled steelhead as part of the ongoing fisheries data collection project for SDSF that began in 1993. De Anda, Hagelshaw and biologist Don Alley also completed fish habitat typing and stream flow measuring.

Biologists from Pacific States Marine Fisheries Commission conducted a survey for coho and steelhead redds and adult fish in 2016-2017 in the region. No redds or adult fish were observed in the survey reach located on the East Branch of Soquel Creek.

Forest staff continued stream and air temperature monitoring using “HOBO” data loggers along Amaya Creek and the East Branch of Soquel Creek, an ongoing activity started in 1997. All eight of the in-stream temperature devices were retrieved in October. The work was summarized in the SDSF 2017 In-stream Temperature Monitoring Report.

The Herpetological Educational and Research Project, led by retired CAL FIRE Captain Lawrence Erickson and sanctioned by the North American Field Herping Association (NAFHA), continued and additional habitat was created during the summer by placing PVC pipes under some of the cover boards.



PVC pipe buried under cover board, Rubber boa, Western skink and Pacific ringneck snake

This project was started in 2010 with the main goal of building a species list of all the reptiles and amphibians found within SDSF. Surveys were conducted in the fall, along stretches of Soquel Creek, for Foothill yellow-legged frogs which are abundant in the forest. California Department of Fish & Wildlife (CDFW) were collecting information to assess the listing status for the species and data from the forest surveys was provided to CDFW.



Foothill Yellow-legged frog larvae with developing legs, Soquel Creek Aug. 18, 2017

A summary report was completed that reflected a total of nine site visits, 28 hours of surveying and 57 records were recorded in the NAFHA's Herpetological Education and Research Project database. This database is a repository of sightings and information on North American herpetofauna that is contributed by amateur citizen scientists and professional herpetologists with the goal of disseminating observational data to scientific, academic, governmental, regulatory and research agencies (www.naherp.com). Whenever a Species of Special Concern is found during a survey, CDFW is notified and the species is registered in their database.

Graduate student Benjamin Plourde continued his work for the lab of Dr. Janet Foley from the UC Davis Department of Veterinary Medicine and Epidemiology, researching blood-borne disease in small mammals. His focus of study is on small mammal populations before and after timber harvesting in the Comstock Mill THP area.

A new research proposal was granted to UC Santa Cruz PhD candidate Nicholas Macias to conduct research in Weir Creek concerning the riparian streamside vegetation inputs to headwater streams, upstream of fish bearing streams.

The California Department of Fish and Wildlife began a new population study of mountain lions in the Santa Cruz Mountains using collected scat to identify DNA and track population trends. They visited the forest for a few days in December with scat detection dogs and collected 225 scats in five weeks throughout the Santa Cruz Mountains.

The Santa Cruz Mountain Puma Project led by Dr. Chris Wilmers and Paul Houghtaling of UC Santa Cruz continued to access their research sites in the forest to monitor the distribution and behavior of local mountain lions using GPS telemetry collars and game cameras.

RECREATION

With the forest closure, only three Special Use Permits were issued in 2017. The Monterey Bay Search Dogs held training days in the summer and fall, and a local bike shop, Trailhead Cyclery, assisted with a group ride “Girls Rock” in September with about 80 women attending. The authorized permit for the Dirt Series Women’s Mountain Biking Clinic for two days in April and May was canceled due to the forest being closed. Four requests for bike demos and mountain bike promotions were denied for being purely commercial in their intent. No fees were collected for special use permits in 2017 but a donation was made by Trailhead Cyclery to the Stewards of Soquel Forest.

Interest in the Flow Trail continued to bring phone inquiries and visitors to the forest office. Volunteers from the Stewards of Soquel Forest and Mountain Bikers of Santa Cruz (MBoSC) spent a day in May assessing the single-track trails for needed trail work. Fire crews from Ben Lomond Conservation Camp and SDSF staff cleared downed trees on several single-track trails. Trail work days were completed in the summer and fall with assistance from MBoSC, since work was postponed earlier in the year due to hazardous conditions from storm damage and lack of access to forest roads and trails. Over 70 volunteers participated for each trailwork “Dig Day” which were sponsored by local businesses that provided food and raffle prizes.

Reports and sightings of E-bikers at SDSF increased in 2017. E-bikes and pedal assist bikes were officially prohibited at the forest starting in 2015 through the annual Public Notice of Closed Areas and Prohibited Activities. Forest staff posted additional signage to remind the public of the prohibition.

Forest staff maintained the trail counters and added to the ongoing visitor use data. A report of annual usage was compiled by De Anda and Hagelshaw. It was determined that a limited amount mountain bike use occurred while the forest was closed to the public. Due to timber operations, segments of Tractor Road were closed temporarily to the public and cautionary signs were posted on the Flow Trail. Sawpit Trail remained closed once the forest was re-opened to the public in June due to the Meridian operation.

Interest in mushroom gathering permits was high during wet months, but no permits were issued while the forest remained closed. A total of 85 permits for personal use (permits are free of charge) were issued in 2017. Hagelshaw attended the Fungus Federation of Santa Cruz meeting in October to distribute permits and to give forest updates. She was also working on the Bear Fire during the same time and provided information about the fire to the community at the meeting.

EDUCATION

A field tour of the Large Woody Debris Project sites, including the road repair and stream revetment along Hihn’s Mill Road, was led in August by Bernheisel, CAL FIRE hydrologist Pete Cafferata, and CGS geologists Cheryl Hayhurst and Steve Reynolds (retired). Representatives from CDFW, NOAA/NMFS, Save the Redwoods League, Sempervirens Fund, Trout Unlimited, and Peninsula Open Space Trust (POST), along with local foresters and CAL FIRE staff toured three sites and heard information on the history, design, permit process, installation and monitoring of the sites. Over 30 people attended the tour, and the group discussed other projects in the region and actions for coho and steelhead recovery.



Field tour of Large Woody Debris Project at Site 4



Road Repair and Stream Revetment Site along Hihn's Mill Road and the East Branch of Soquel Creek

In October, Hagelshaw and De Anda taught lessons on forestry at Soquel High School for five classes of students. Some of these students attended the Santa Cruz Forestry Challenge in November. Bernheisel, Noyes, De Anda and Hagelshaw assisted with the Forestry Challenge in Boulder Creek by

participating on panels at Ask a Forester night and by acting as judges for the final presentations by students.

The NatureTour app program that was completed in 2016 continued to provide information recorded in English and Spanish, about the history, ecology, research projects, recreation uses and forest management practices at SDSF, by guiding the users through 18 stops along Hihn's Mill Road. Funding for the app was supplied by the Forest Resource Improvement Fund under an interagency agreement between CAL FIRE and the UC Regents. NatureTour remains available at:

<https://play.google.com/store/apps/details?id=org.sodmap.naturetour>.

EMERGENCY RESPONSE AND LAW ENFORCEMENT

CAL FIRE engines and forest staff responded to eleven requests for medical aid by injured mountain bikers on the forest in 2017, as well one fire, one lost dog and a search and rescue request for mountain bikers lost in the dark. The Loma Prieta Fire and Rescue volunteers also responded to most of these incidents. Two requests involved air ambulance dispatch or transport, and five of the accidents occurred on the Flow Trail. At least seven patients declined ambulance transport against medical advice, but requested transport out of the forest to a personal vehicle. Unit law enforcement assisted with patrols during the forest closure and reminders were posted on cars parked along Highland Way. The closure was announced on social media and additional signage was posted. One citation to a mountain biker was issued for violation of the closure.

In April, trespassers in a 4-wheel drive vehicle caused damage to forest gates and roads as well as to gates on neighboring Redwood Empire property. A vehicle was found illegally parked along Comstock Mill Road in the summer. In August, Noyes encountered a lost member of the public within a closed area of the forest, and a search for a possibly wrecked vehicle was then carried out by CAL FIRE and Santa Cruz County Sheriff's Office resources, but no car was located. An illegal marijuana plantation was eradicated in late July on property adjacent to SDSF owned by the Mid-Peninsula Regional Open Space District. Sheriff's Deputies and CDFW peace officers coordinated with CAL FIRE for use of the helipad at SDSF to transport garbage and plants from the site into trucks for disposal.

ANNUAL FINANCIAL SUMMARY

SOQUEL DEMONSTRATION STATE FOREST

2017 CALENDAR YEAR

	Expenditures	Revenues
SALES		\$ 853,473
CLASS I		\$ 6,510
CLASS III		\$ 846,963
MAP		
Camping Fees		
Special Use Permits		
Miscellaneous Revenue		
ROAD USE FEES		
ADMINISTRATION*	\$ 498,277	
PERSONNEL	\$ 430,434	
BASE OPERATING	\$ 67,843	
CAPITAL INVESTMENT**	\$ -	
RECREATION		
ROADS		
FACILITIES (other than Recreation Infrastructure)		
REFORESTATION/TIMBER STAND IMPROVEMENT		
LAND		
SURVEYING		
RESEARCH & DEMONSTRATION		
IN-LIEU PROPERTY TAX***	\$ 6,403	
YIELD TAX (paid by timber purchaser)		
TOTAL	\$ 504,680	\$ 853,473
BALANCE TOTAL		\$ 348,793

*Includes all personnel, material and service expenditures charged to SDSF budget for the 2017 calendar year minus capital investment expenses (contracts); Source: previous and current fiscal year HFD Budget Report (Q12) - 13 month.

**Includes all capital investment expenditures charged to SDSF budget for the 2017 calendar year; Source: previous and current fiscal year HFD Budget Report (Q12) - 13 month.

***Based on current fiscal year Property Tax Bill

ANNUAL REPORT OF TIMBER CUT

Soquel Demonstration State Forest

From January 1, 2017 to December 31, 2017

COMMERCIAL SALES

FOREST PRODUCTS CONVERTIBLE TO BOARD FEET

Product (give dimensions)	Conversion Factor	# of Pieces, Cords, Lineal Feet, Etc	MBF	Value
MBF		1466.99		\$846,963.17
Cords				0
Christmas Trees				0
Posts (size)				0
Shingle Bolts				0
Poles (size)				0
Grape Stakes				0
Shakes				0
TOTALS		1466.99		\$846,963.17

Miscellaneous Forest Products - Not Convertible to Board Feet

Kind	Unit	Quantity	Value
Firewood	cord	325.5	\$6510
Hardwood	tons	0	0
Seedlings	each	0	0
TOTALS			\$6510.00

No Forest Products were cut for Department Use (i.e. fire stations).

Approved by Angela Bernheisel _____ Signature Angela Bernheisel

Title Forest Manager _____ Date Submitted June 13, 2018 _____

STATISTICAL DATA

SOQUEL DEMONSTRATION STATE FOREST

2017 CALENDAR YEAR

ADMINISTRATION

	<u># Processed</u>	<u># Pending</u>
Rights-of-Way	<u>0</u>	<u>0</u>
Leases	<u>0</u>	<u>0</u>
Trespass Cases	<u>0</u>	<u>0</u>

PROTECTION

<u>Fires:</u>	# of Fires: <u>1</u>	Fire Patrol Person-Days: <u>40</u>
	Acres Burned: <u><1</u>	# of Campfire Permits Issued: <u>0</u>
<u>Insects:</u>	# of Trees Treated: <u>0</u>	# of Acres Covered: <u>0</u>
	Control Methods Used: <u>0</u>	
<u>Disease:</u>	# of Contract Acres Treated: <u>0</u>	# of State Acres Treated: <u>0</u>
	# of Pest Detection Reports Submitted: <u>0</u>	
<u>Hazard Reduction:</u>		
	# of Snags Felled or Removed: <u>0</u>	Acres Treated: <u>7.3</u>
	Roadsides Treated (miles): <u>1</u>	Salvage Volume (mbf): <u>10</u>
	Acres of Slash Abated or Cleanup: <u>7.3</u>	Fuel Treatment Acres: <u>7.3</u>

TIMBER STAND MANAGEMENT

<u># of Timber Sales:</u>	Class I: <u>10</u>	Class III: <u>1</u>
	(e.g. Salvage, Christmas tree & Firewood Permits)	
<u>Timber Stand Improvements:</u>	# of Trees Pruned <u>0</u>	Acres: Pruned <u>0</u> Thinned <u>0%</u> Released <u>0</u>
	Planting: <u>0</u> (acres)	# of Trees: _____
	Seeding: _____ (acres)	# of Spots: _____
	Site Preparation: _____ (acres)	
Method(s) of Site Preparation:	_____	
	(e.g. Excavator, Brushrake, Masticator, Broadcast Burn, Lopping, Hardwood Felling, Hack-n-Squirt)	

INVENTORY

	<u>Size of Plot</u>	<u># of Plots</u>
Inventory Plots Established:	<u>1/5 acre</u>	<u>307</u>
Other Plots	_____	_____
Established: Plots	_____	
Remeasured:		
Acres Cruised:	<u>1552</u>	

ENGINEERING

Corners Recovered or Set:	<u>0</u>
Miles of Line Run:	<u>0</u>
Miles of Boundary Surveyed and/or Posted:	<u>0</u>
Boundary Surveyed and Posted To-Date:	<u>42%</u>

OUTREACH, EVENTS & TOURS

of Occasions: Outreach: 10 Events: 2 Tours: 4

EXPERIMENTS & DEMONSTRATIONS

of Projects: Submitted: Approved: 10 Completed: 4

Approved Projects Worked On: (List By Titles) Reports Submitted:

2017 Steelhead Trout Population and Instream Temperature Monitoring Reports

Stream Flow Modeling Study, ongoing

SDSF Herpetology Survey 12/2010-12/2017, ongoing

Santa Cruz Mountain Puma Project, ongoing

Sudden Oak Death Studies, ongoing

Large Woody Debris Stream Habitat Restoration and Streambank Repair Projects

Blood-borne Disease Study, ongoing

CAPITAL IMPROVEMENTS

(e.g. Miles & tenths)

New ConstructionTotal SystemAmount Maintained

Main Timber Access Roads:	0	8.8	8.8
Spur Timber Access Roads:	1.9	5	5
Other Roads:	0		
Firebreaks:	1	7	2
Trails:	0	12.2	12.2
Powerlines:	0	0	0
Communication Sites:	0	0	0
Water Development:	0	0	0
Bridges:	0	2	2
Campgrounds:	0	1	1
Camping Units:	0	1	1
Picnic grounds:	0	4	4
Picnic Units:	0	9	9
Installed Toilets:	0	0	0

RECREATIONPrimary Use¹Day Use
(Visitor Days)*Overnight Use
(Campers)Overnight Use
(Camper Days)

Camping:	N/A	0	0
Fishing:	N/A	0	0
Hunting:	N/A	0	0
Picnicking:	0	0	0
Sightseeing:	0	0	0
Hiking:	2700	0	0
Horseback Riding:	0	0	0
Nature Walks:	0	0	0
Mountain Biking:	18000	0	0
ATV:	0	0	0
Snow Sports:	0	0	0
Other (mushroom gathering.):	300	0	0
TOTAL:	21000	0	0

* Enter N/A under "Day Use" if activity is not applicable to or not allowed on the DSF.

¹ Assign primary use to avoid duplication when forest user participates in more than one activity.



DEPARTMENT OF FORESTRY AND FIRE PROTECTION
Soquel Demonstration State Forest

4750 Soquel-San Jose Road
Soquel, California 95073
(831) 475-8643
Website: www.fire.ca.gov



June 6, 2017

PUBLIC NOTICE

THE SOQUEL DEMONSTRATION STATE FOREST IS CLOSED TO THE
FOLLOWING ACTIVITIES WITHOUT PERMISSION OF THE FOREST MANAGER:

1. Shooting Firearms
2. Hunting
3. Riding Motorized Vehicles Including Motorcycles and ATV's
4. Riding Power Driven Devices (i.e. E-BIKES and segways)
5. Gathering Mushrooms Without a Permit
6. Entrance & Use During the Hours from Dusk until Dawn
7. Public Assembly & Demonstration
8. Campfires
9. Angling

The first eight closures are made according to California Code of Regulations Section 1438 for public safety and to protect the natural resources of the Forest. Angling is prohibited by the California Department of Fish and Wildlife to preserve the fishery.

ROAD AND AREA CLOSURES

- ❖ The Meridian Timber Harvesting Plan area including Ridge Trail from the intersection with Tractor Trail and all of Sawpit Trail are closed.
- ❖ The Flow Trail and Tractor Road/Trail will be closed intermittently during the summer of 2017 on weekdays.
- ❖ Hihn's Mill Road (the main Forest road) between its junction with Amaya Creek Road and the southern boundary of the Soquel Demonstration State Forest (adjacent to the Olive Springs Quarry) is closed to public use or entry.
- ❖ The southwest corner of the Soquel Demonstration State Forest is closed to public use or entry.

These area closures, which shall be in effect until one year from the date of this letter, are made to ensure public safety and protect natural resources under authority of Title 14, Section 1439, California Code of Regulations.

It is hereby further notified that, under authority given, the following classes of persons may enter to conduct their activities or official duties as prescribed by the forest manager: Authorized contractors, researchers and their employees performing approved work on the Forest.
It is so ordered.

Date

Angela Bernheisel, Forest Manager

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA.GOV.



*All visitors are responsible for knowing
State Forest regulations and fees.
Contact office for information.*

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